

LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Original) A method of detecting a virus in an avian tissue sample comprising: extracting genetic material from an avian tissue sample; and testing the extracted genetic material to detect any genetic material from the virus; characterised in that the avian tissue sample is derived from one or more feathers of the axillary tract.

2. (Original) A method of detecting a virus as claimed in claim 1 wherein the method provides quantitative information on the amount of the virus in the sample.

3. (Previously presented) A method of detecting a virus as claimed in claim 1 wherein the method is specific for Marek's Disease Virus (MDV).

4. (Original) A method as claimed in claim 3 wherein the method is specific for MDV serotype 1.

5. (Original) A method of detecting MDV as claimed in claim 4 wherein the method is specific for MDV-1 Rispens strain CVI 988.

6. (Original) A method as claimed in claim 5 wherein the method comprises:

- (i) providing forward and reverse primers for a nucleic acid polymerase, which primers are selected from the nucleotide sequence which flanks the 132 bp repeat nucleotide sequence of MDV;
- (ii) amplifying nucleic acid sequences between the primers;
- (iii) detecting the number of 132 bp repeat sequences in the amplified nucleic acid sequences; and
- (iv) relating the number of 132 bp repeat sequences to the identity of the viral nucleic acid and thereby identifying the type of MDV in the tissue sample.

7. (Previously presented) A method as claimed in claim 1 which comprises

- (a) providing a polynucleotide sequence which is capable of binding specifically to a virus-specific target polynucleotide;

- (b) contacting the extracted genetic material with a probe whereby the probe binds specifically to its target viral polynucleotide;
- (c) determining whether the probe has bound to its target viral polynucleotide; and
- (d) determining whether the sample contains the virus on the basis that the presence of the target polynucleotide indicates the presence of the virus in the sample.

8. (Original) A method as claimed in claim 7 wherein the step (c) of determining whether the probe has bound to a target polynucleotide comprises amplifying a region of the target polynucleotide, which region comprises the binding site of the probe.

9. (Previously presented) A method as claimed in claim 8 wherein amplification is primed by the following primers:

Forward primer (GGT CTG GTG GTT TCC AGG TGA) (SEQ ID NO:2)

Reverse primer (GCA TAG ACG ATG TGC TGC TGA) (SEQ ID NO:3).

10. (Previously presented) A method as claimed in claim 9 wherein the probe has the sequence

5' AGA CCC TGA TGA TCC GCA TTG CGA CT 3' (SEQ ID NO:1).

11. (Previously presented) A method as claimed in claim 7 wherein the probe is labelled fluorescently and wherein the step of determining whether the probe has bound to a target polynucleotide comprises determining the fluorescent emissions of the probe.

12. (Previously presented) A method of detecting a virus as claimed in claim 1 wherein the method involves the use of a PCR reaction.

13. (Original) A method as claimed in claim 12 wherein before said PCR reaction is carried out, the extracted genetic material to be tested is treated with an agent to overcome the inhibitory effect of any feather tissue factor which may be present.

14. (Original) A method of detecting a virus as claimed in claim 13 wherein the agent is selected from one or more of bovine serum albumin; porcine (pig) albumin; and ovine (sheep) albumin.

15 – 21. (Canceled)

22. (New) The method of claim 12, wherein said PCR reaction includes bovine serum albumin (BSA).